

~~CONFIDENTIAL~~ SECRET/CONTROL - U.S. OFFICIALS ONLY
 CLASSIFICATION SECURITY INFORMATION

CENTRAL INTELLIGENCE AGENCY

REPORT

INFORMATION REPORT

CD NO.

50X1-HUM

COUNTRY Germany (Russian Zone)

DATE DISTR. 13 Dec. 1951

SUBJECT Ground Station and Receiver for Control of
the Wasserfall Guided Missile

NO. OF PAGES 2

PLACE
ACQUIREDNO. OF ENCLS.
(LISTED BELOW) 3

50X1-HUM

DATE OF
INFO.

CIRCULATE

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE
 OF THE UNITED STATES. WITHIN THE MEANING OF TITLE 18, SECTIONS 793
 AND 794, OF THE U. S. CODE, AS AMENDED, ITS TRANSMISSION OR REVEL-
 ATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON
 IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

1. Order for ground stations

In the beginning of June 1951, the management of RFT Köpenick was expecting an order from the USSR to build 100 ground stations for guided missiles.* 50X1-HUM

2. Assembly of the Strasburg receiver

After the end of May 1951, when 1700 complete Strasburg receivers had been assembled by RFT Köpenick for delivery to the USSR, no additional complete receivers were assembled at this plant*. Since that date, only the separate parts of the receiver have been exported to the USSR for assembly.

3. Russian officials concerned with the program

50X1-HUM

- a. One fnu Soloev acts at RFT Köpenick as control and acceptance official for the Strasburg receivers. He has no military rank. He is technically well informed on the details of the Wasserfall guided missile.

- b. The Russian in charge of the Wasserfall guided missile project in the USSR is one fnu Kaporin, a Stalin Prize winner. He always wears civilian clothes. He has visited Berlin at various times. It is thought that it is he who will bring a decision from the USSR to Köpenick about the building of the ground stations (see paragraph 1).

4. Details of the ground stationa. Modulation, etc.

Besides the stages given below, there are the frequency doubling stage with 1 x LS-50 tube and a power stage with 2 x LS-50 tubes. The various stages are in separate containers connected with the power supply. The degree of modulation is 40%, with a peak output of 120 w and 40 w (sic). The transmitter is grid modulated.

CLASSIFICATION SECRET/CONTROL - U.S. OFFICIALS ONLY

50X1-HUM

STATE	<input checked="" type="checkbox"/> NAVY	<input checked="" type="checkbox"/> NSRG		DISTRIBUTION	
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> FBI	OST/ Guided Missiles	Ex	

Document No. 9
 No Change
☐ Declassify
 Class. 61
 Auth: 100 3
 Date: 31 AUG 1978

~~CONFIDENTIAL~~
SECRET/CONTROL - U.S. OFFICIALS ONLY

50X1-HUM

CENTRAL INTELLIGENCE AGENCY

-2-

b. Modulation unit

Nine different sinusoidal control frequencies are produced in this unit. One of these is 200 Hz for the firing command (Zündkommando); the other eight frequencies are used in four selected ways.

c. Multivibrator

This vibrates at 5 Hz or 25 Hz, as selected. In this way it is possible to operate the rudder (Seitensteuerung) with 5 Hz and the elevators (Höhensteuerung) with 25 Hz or vice versa with the one frequency.

d. Indicator unit

Here, are recorded readings of the command value (Kommandowert) on a scale of 0.8 - 0 - 0.8, and also the modulator voltage and the degree of modulation.

e. Control column (Knüppel)

See the attached diagram and the errors determined, which are listed at the end of this report.

f. Antenna

It has a cross-dipole with "Symmetrietopf der Sender unsymmetrischen Ausgangs".

g. Balanced antenna (Künstliche Antenne)

This is switched in by means of the S.E. switch.

h. Control receiver

Similar to ground station receiver, but it has only the LF part, with 9 LF circuits. (See b above)

i. Target indicator (Taurechner)

This is contained in a comparatively large box with the equivalent circuit resistance (see diagram).

Control Column (Knüppel)Table of Errors

Kommando u. Ersatzgeber	H F Seite	H F Höhe	N F Seite	N F Höhe
0	0	0	+0.48%	+0.48%
-0.4	-0.37%	0.39%	-0.39%	-0.4%
-0.8	-0.80%	-0.82%	-0.81%	-0.81%
+0.4	+0.32%	+0.30%	+0.37%	+0.4%
+0.8	+0.74%	+0.80%	0.76%	+0.81%

50X1-HUM

* Comment: Concerns in Berlin-Köpenick under VVB RFT, as of 1 January 1951, included the Funkwerk Köpenick and the Zentrallaboratorium für Signal- und Sonderanlagen Köpenick, both located at Wendenschloss-Strasse 154-158; the two concerns were consolidated as of 1 June 1951. Strasburg airborne receivers were previously reported to be assembled at the Zentrallaboratorium für Signal- und Sonderanlagen; see [redacted] 50X1-HUM

50X1-HUM

~~CONFIDENTIAL~~
SECRET/CONTROL - U.S. OFFICIALS ONLY